

# THE ACADEMICIAN.

VOL. I.

NEW-YORK, SATURDAY, JANUARY 9. 1819.

NO. 14.

PUBLISHED SEMI-MONTHLY, BY ALBERT & JOHN W. PICKET, AT 3 DOLLARS PER ANN.

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NO. XV.

Κοσμητικὸν ἔστιν, ὡς εἶπε Κράτης, τὸ κοσμεῖν. Κοσμητικὸν δὲ τὸ κοσμιωτικὸν γυναικὶ ποιεῖν. Ποιῶν δὲ τοιαυτῶν οὐ χρυσοῦς, οὐτε σμαραγδῖς, οὐτε πορφύρα, ἀλλ' οὐδ' αὖτις ἀνθρώπου.

Plutarch.

"Ornament, as Crates said, is that quality which possesses the power of adding grace. But that quality possesses the power of adding grace, which renders a woman more graceful. Now it is neither gold, nor the emerald, nor the purple dye, which does this; but it is, that, whatever it is, which exhibits indication of dignity and delicacy, of a well regulated mind, and of modesty.

Corporum nutrices, animarum noveræ. Tam stulte filias diligimus, ut odisse potius videamur. Corporis cura mentem obruerunt.

Cardanus and Quintillian.

Fond nurses of the body are mothers-in-law to the mind.—We love our daughters so foolishly, that it looks as if we hated them. By too much care of the body, they have overwhelmed the mind.

Tunc, cum ad canitiem—tunc, tunc, ignoscere—  
NOLO. Persius, Sat. 1.

What? when the hair is absolutely grey with years, do you ask me to overlook such folly? No, no, no.

FEMALES being possessed of rational souls as well as men, equally as great care should be bestowed upon the culture of their understanding as upon men's. We do not mean, that the same kind of education should be given to women as to men; but that the education which they do receive should be of a sound and wholesome nature, and correspondent to the situations which they are to fill in life.\*

\* There are many prejudices, says the celebrated Dr. Knox, "entertained against the character of a learned lady; and perhaps, if all ladies were profoundly learned, some inconvenience might arise from it; but I must own it does not appear to me, that a woman will be rendered less acceptable to the world, or worse qualified to perform any part of her duty in it, by having employed the time from six to sixteen, in the cultivation of her mind. Time enough will remain, after a few hours every day spent in reading, for the improvement of her person, and the acquisition of the usual accomplishments.—To which, he adds, the unmarried and married find many intervals which they often devote to some species of reading. And there is no doubt, but that the reading would be selected with more judgment, and would afford more pleasure and advantage, if the taste were formed by early culture.—

The processes generally practised at present, are not calculated to strengthen their mental powers; but rather to enervate them, and to render them, in a great measure, incapable of attending to domestic affairs. The intellectual functions of the females are wrapped in a perpetual cloud of darkness, because the opinion is too firmly established, that women do not need solid understandings.\* And, indeed, the confirmation of this doctrine, strange as it is, appears, when parents instead of endeavouring to dissolve the vapour of mental darkness, which rests upon their offspring, are contented to entrust them to the instruction of others, in the early stages of their life, without examining their moral characters, or consulting the modes of education which they pursue. The injurious effects of this practice may be best seen by noticing the bringing up of youth in the decline of the Romans, when they had lost their virtues, together with the liberties of the ancient republic, and these generous cares, with every other rational and laudable attention, gave way to the fashionable dissipation of those degenerate days.†

"The little child was then consigned to the care of some paltry Greek female, in conjunction with two or three other ignorant and vicious domestics, equally unqualified and ill disposed for the important

To those, he farther observes, who enjoy opulence, I would venture to recommend, that they should receive a classical education. But let not the reader be alarmed. I mean not to advise, that they should be initiated, without exception, into Greek and Latin; but that they should be well and early acquainted with the French and the English classics."

\* This observation applies to those whose ignorance precludes the possibility of their seeing the consequences, if this were a universal opinion; and to those, with whom learning is nothing and money every thing. But thanks to a christian philosophy and the exertions of genius, that bondage under which the female mind laboured in dark and superstitious ages and countries, and still continues in some parts of the world, has begun to disappear, and woman among few nations of the present time, from being considered as a mere thing of sensual gratification and child-bearing animal, now assumes her proper station, a station which God intended her to hold.

We remember to have heard some gentlemen who were, speaking on the subject of female education, say, "where is the use that our daughters should know any thing of literature? it is enough if they can dance, sing and cook." We will venture to say, that those who have dancing, singing and cooking wives, and who are incapable of any thing rational, really wish, they had not got such merry and silly women as partners to continue with them through life.

\* Cicero de Senectute. De oratore. W. Melmoth.



office of tuition. From the idle tales and gross manners of this low and illiberal tribe, the soft and ductile mind was suffered to receive its earliest and deepest impressions. The parents themselves, indeed, far from training their young families in the principles of virtue and knowledge, were the first to lead them by their own encouragement and example into the most luxurious indulgences and most unprincipled licentiousness of manners. A passion for horse racing, *theatrical amusements*, and gladiatorial shows, was sown in them, before their birth: and when the seeds of these contemptible and unmanly pleasures have early taken root in the heart, they necessarily over-run and destroy every affection of nobler growth."

That this picture of degenerate Rome bears some resemblance to our times cannot be denied. The same spirit for balls, *theatrical amusements*, low nurses, and servile talents and morals, exists at present, and parents themselves: not only indulge their children in visiting these places,\* but even lead the example.

Cereus in vitium flecti.† Horace.

It is common among parents in tolerable circumstances, after their daughters are let loose from the nursery, as it is called, to send them to some school, at a distance from parental care, and even to continue them there, after a certain age, provided that the said school be noted, by report, for the superiority of its tutors, in teaching dancing, music, painting, &c while they pay little or no attention to the means by which their expanding minds may be imbued with the sound principles of morality and religion, the best and most certain protectors of female virtue. Indeed, we are sufficiently taught by experience, that by these, they may, in general, defend themselves against infidel opinions, and the wiles of the circumspective seducer, when no other weapons are near at hand, or can be of any avail.‡

\* Non est, non mihi credite, tantum ab hostibus armatis ætati nostræ periculum, quantum ab circumfusus undique voluptatibus.

Livy.

There is not, believe me, there is not so much danger to a youth from a host of armed enemies, as there is from the allurements of pleasure, which every where surround him.

† Yielding as wax to vice.

‡ "Weak, wicked, and vain men have always taken a great deal of pains to lower the FEMALE SEX, and to represent them as incapable of real virtue and solid excellence. It is easy to see their scope. Even some authors of great name among the profligate, have endeavoured to confirm the degradation of female dignity. The attempt, when successful, often becomes to both sexes the cause of poverty, disease, shame, remorse, suicide and of every evil with which God has thought proper to visit voluntary, presumptuous and continued transgression of those laws which were first written on the heart, and then in the scriptures; THE LAWS OF MORAL AND RELATIVE DUTY.

For it is almost universally to be observed, that the first step taken by these villainous characters, to unhinge female chastity, is to undermine their religious and moral principles. If, therefore, these first of all earthly concerns be but slightly impressed upon their minds, they will, perhaps, with difficulty, escape the snare which has been so artfully laid for them: they will become the most abject and miserable wretches, through the remaining part of their lives, and, at last become tenants of those doleful regions of misery, where hope never comes, and where anguish and despair abide for ever. Upon their first being betrayed to leave the paths of virtue, they, for a short time, follow the deluding Syren's voice, who speaks but to betray, and allures but to render wretched. The least deviation from the path of virtue, however, will surely, at no distant period, carry along with it, its own punishment.

We have never been able to answer the objections raised by many, against the improvement of the mental powers of females; but on the contrary have found many advantages derivable from it to society, in general. One of the strongest arguments for women's being well educated, is, that it enables them to superintend the education of their children in the early periods of their existence, when the mind is so susceptible of wrong or right notions.\* The

The WOMEN indeed may become the best REFORMERS. The dignity of female virtue, consistently supported, is better calculated than any moral lesson, to strike confusion and awe into the breast of the EMPTY AND ARTFUL VILLAIN. But the vices of one part of their sex, and the VARIOUS HINDRANCES TO MARRIAGE, have often driven the virtuous to submissions which may in time verify the assertions of their satirists."

Dr. Knox.

\* Cornelia was the daughter of Scipio Nasica, and the wife of Pompey the Great. Plutarch speaks of her thus in his life of Pompey.—Εὐρη δὲ τὴν καλὴν ΠΟΛΛΑ ΦΙΛΤΡΑ διχὰ τὸν ἀνδρα καὶ γὰρ περὶ γέγραμματα καλὰ ἔσχετο καὶ περὶ λόγους ἔχουσα, καὶ ἀνὰ φιλοσοφίαν εὖ διδοὺς χρηστέας ἀκούειν, καὶ πρὸς τὴν τοῦτο καὶ ἀδελφὴν καὶ περὶ γὰρ καὶ τὴν.

There were in this lady many charms besides her beauty. For she was finely accomplished in literature, in music, and in geometry, and she used to attend to philosophical discourses with great advantage. She had also manners perfectly pure of all austerity and impertinence."

Plutarch.

"He of whom antiquity boasts itself as the wisest of mortals, was instructed in many elegant and profound subjects of learning by a lady

Ἀσπασία μὲν τοι ἡ σοφὴ Σωκράτους διδάσκαλος τῶν ἐπιτοκῶν λόγων.

Athenicus.

Aspasia the learned lady, was the preceptor of Socrates in rhetoric.

care of infants falls to the mothers, unless they are incapable from constitutional infirmity of attending to the management of their darling pledges. If therefore the maternal conversation and manners be not of a salutary nature, the infantile mind will feel their baneful effects, and as it increases in years, they will become more firmly rooted, till finally they become almost incapable of being erased. On the contrary, children educated by mothers\* of solid understandings, who approve of internal worth more than of external accomplishments, have generally turned out useful members of society, and ornaments to themselves and guardians. If they have not in modern, they did in ancient times, and we think were the example of some of the Roman matrons!

Πλάτων τον Σωκράτην ἀρεῇ αὐτῆς πρὸς τοὺς μαθητὰς ἐπαινεῖ.

*Harpocration.*

*Plato says, that Socrates learned politics of her."*

\* An ambassador of Persia asked the wife of Leonidas why they honoured women so much in Lacedæmon? It is because, said she, they alone know how to make men. A Greek lady shewed her jewels to Phocion's mother, and asked to see hers. *She shewed her children, and said to her, these are my dress and ornaments; I hope one day they will be all my glory."*

*Marchioness De Lambert.*

To these illustrious women, may be added another, no less eminent for her talents and learning than she was for her piety. This was the wife of the celebrated American Dr. Ramsay. She seemed to have cultivated her mind for the best of purposes, to honour her God, and instruct her children. She was well acquainted with many branches of science, had a very correct knowledge of the French, and of the Latin and Greek languages; and taught her own offspring the construction of their vernacular tongue, as well as of the other languages with which she was familiar. *Such a mother is worth all the fairs in existence.*

\* "Some ladies may be of opinion, that I assign them a task rather too humble, when I urge the propriety of their educating their little ones in the first period. I can only say, that I am justified in my advice by the example of the greatest writers, and THE BEST WOMEN OF ANTIQUITY. And I will ask, whether the important business of DRESSING and going to public places, will be so satisfactory a few years hence, as the consciousness of having sown the seeds of virtue, taste and learning, in the infant bosom of their own offspring."

*Dr. Knox, Lib. Education.*

† Jamprimum filius ex casta parente natus, non in cella emptæ nutricis educabatur, sed in gremio ac sinu matris, cujus præcipua laus erat, tueri domum et in-servire liberis.... Sic Corneliam, Græchorum, Aureliam, Julii Cæsaris, sic Attiam, Augusti matrem, præfuisse educationibus liberorum accepimus.

*As soon as a son was born of a chaste parent, he was not brought up in the cottage of some hireling nurse, but in the lap and bosom of his mother, whose principal merit was to take care of the house, and to devote herself to the service of the children.... Thus are we told,*

to be imitated, we should not so often be vexed with an illiterate and fretful wife, and depraved and ignorant children.

The end of female education, many parents think, consists exclusively in ornamental accomplishments, and the adorning of their daughter's bodies.\* Weakness of intellect and habits of persevering ignorance prevent them from seeing the fatal influence which these fripperies of folly have upon the female mind. They do not reflect, that they are more apt, from their limited education, and their flattered beauty, to dive deeper into folly than the male sex, and that this increases with their years, till they become the objects of merited contempt. The whole tenour of their instruction recommended by parents, and often by instructors, tends to render young females ridiculous and illiterate. A mind weakened by parental and preceptorial caprice, cannot excite much respect or attention. Creatures who value themselves upon their form, and who have no other ambition, but to make a handsome appearance, must possess a very shallow understanding, and can scarcely deserve to be ranked among rational beings.†

If parents desire, that their daughters should fill a respectable place in society, it is necessary, in the first place, to give them a correct knowledge of religion and the moral duties, to furnish their minds with sound and practical information, to excite a relish for reading, from which they will reap more exquisite delight, than in viewing the fantastic ornaments of the body. Let there be added, a knowledge of numbers, of orthography and English Grammar, that they may not expose themselves to the ridicule of those, with whom they hold a correspondence; an acquaintance with Geography, History and Biography, or their conversation will be extremely limited. And whoever has the misfortune to get a partner for life, without some acquaintance with

*Cornelia, the mother of the Gracchi, thus Aurelia, of Julius Cæsar, thus Attia, of Augustus, presided over the education of their children.*

\* Τὸ πρῶτον ἐν τῇ παιδείᾳ τῶν κοίτης καὶ τοῦ σώματος καὶ τοῦ ὅψεως ἐστὶν ὁ κύριος σκοπός. ἀλλὰ καὶ τὸ πνεῦμα καὶ τὸν λόγον ἀναπαινεῖν καὶ ἀγαθὰς ἐξουσίας αὐτοῦ ἐκτρέφειν.

*Demosthenes.*

*It is necessary that the high-born and the beautiful should display at the same time beauty indeed in their external appearance, moderation in their mind, but fortitude in both these, and grace in all their words.*

† "Women from fourteen years of age are flattered with the title of mistresses by the men. Therefore perceiving that they are regarded only as qualified to please the men, they begin to adorn themselves; and in that to place all their hopes. It is worth while, therefore, to fix our attention on making them sensible, that they are esteemed for nothing else, but the appearance of a decent, and modest, and discreet behaviour." *Epictetus.*



these, will consume many an hour with her in discontent; pointing out her foibles and imperfections, when compared with the elegant and useful attainments of those who are her superiours in virtue and information; and descanting with acrimony upon her deficiencies, in those qualifications which mark a splendid and refined mind.\*

But how, it may be asked, can these unfortunate females whose moral and religious education has been neglected, in their younger years, spend their vacant hours? The answer is in *scandal*: for to this abominable vice, those persons in general resort, who are incapable of conversing upon any rational subject, of receiving amusement or instruction from books, or of instructing persons of inferior understanding.

Plays, romances, love-verses and cards are the complete ruin of young girls. For, if they find any entertainment in them, they must unavoidably give their mind a cast, which can never be suitable to the useful part of a female character, which is wholly domestic. For, whatever the fine ladies of our age may think of the matter, it is certain that the only rational ambition which they can have, must be to make obedient daughters, loving wives, prudent mothers and mistresses of families, faithful friends and good christians; characters much more valuable than those of skilful gamblers, fine dancers, singers, or dressers, or even than sculptors or painters.†

Many‡ evil effects attend the preposterous practice of parents' putting novels and romances in the hands of their daughters. Their contents have the most powerful influence upon their minds. Indeed, nothing less, in general, than the highest degree of affectation, follows a pretty close perusal of them, exclusive of many other evils, of which they are so frequently productive. They vitiate the taste: hence the beauties of the most elegant and profound authors pass unnoticed. Indeed, we cannot reasonably suppose, that those, who spend their time in the perusal of such trash, can have imbibed that elegance of

mind, which almost inevitably results from an attentive perusal of the English classics. These may be considered as fountains of sublimity and grandeur, and will, to persons of taste and judgment, afford far more interest than the fungus growth of all the novels and romances, which were ever written: for these last, instead of promoting the progress of the human intellect, overthrow the empire of reason and render the fairest form loathsome and disgusting.

It is well known, that internal elegance adds beauty to external grace. "We believe it will also be favourable to virtue, and will operate greatly in restraining from any conduct grossly indelicate and obviously improper. Much of the profligacy of female manners has proceeded from a levity, occasioned by the want of a proper education. They who have no taste for well written books, will often be at loss how to spend their time;‡ and the consequences of such a state are too frequent, not to be known, and too fatal not to be dreaded."

The present usual modes of education being productive of nothing which can make life pass more pleasantly away, we would advise, that if parents feel disposed to render their daughters happy, as well as useful members of society, they would endeavour to bestow upon them, such qualifications, as will add vigour to life, and make them good mothers and mistresses of families, so that when the empire of beauty and youth is lost, when the youthful passions for the amusements of folly have subsided, and when graver things claim their attention, they may still find pleasure from internal sources. Learning and good sense, are more attractive than beauty with all her charms. For this fair flower will, in time, decay, while the former instead of decreasing, increases by the rapid flight of years.

Οταν ρυσαιτο καλλῶς ἑπαινομένη τρεπεῖ  
Χρῆστος, διπλάσιος ὁ πρῶτος αἰσθηταί.

Menander.

When the fair form, which nature gave, is graced  
With virtuous manners, then whoso'er draws nigh  
Is doubly captivated.

Nothing (says Fordyce) can fix esteem, but that kind of beauty, which depends on the splendour of a virtuous and enlightened mind. The least degree of understanding will be disgusted at petulance, caprice or nonsense, even in the fairest form. External accomplishments are continually losing; internal attractions are continually gaining. A beautiful character is, as the morning light, that shineth more and more unto the perfect day. Sense, spirit, sweetness, are immortal. All besides withers like grass. The power of a face to please is diminished every time it

\* "It is, I think, impossible, that they who are engaged in little and mean actions can entertain great and manly sentiments: as on the other hand, they who are conversant in honourable and splendid employments, can not think in a little and low manner."

Demosthenes.

† Burgh's Dignity of Human Nature.

‡ We have known many parents to put novels and romances, indiscriminately, into the hands of their children, before the sacred volume. The consequences were, that their taste was vitiated, their judgments weakened, and it afterwards become almost impossible to restrain their immoderate desire for them.

"Care must be taken in the choice of books; for, it must be acknowledged, that without care, the learning of a lady may expose her to great corruption."

Knox.

\* "How happy is it to know how to live with one's self, to leave one's self with regret, to find one's self again with pleasure! The world is less necessary to one."

Marchioness De Lambert.



is seen. When beauty of looks loses its power to please (and this will inevitably follow, as the night follows the day) the soul will seek a soul; it will refuse to be satisfied with any thing else. If it find none, in vain shall the softest eye sparkle, in vain shall the softest eye entice. But if a mind appear, and where ever it resides a mind will appear, it is recognized, admired and embraced; even though the eye possess no lustre, and smiles, at the moment, be banished by sorrow.

Mind, mind alone, bear witness earth and heaven!  
This luring fountain in itself contains  
The beauteous and sublime! Here hand in hand  
Sit paramount the graces.\* *Akenside.*

On the manner of teaching Mathematics, and appreciating in examinations, the knowledge of those who have studied them.

(Concluded from page 198)

In the former schools of the candidates for the navy, for instance, a professor having eight or ten pupils at most, and four hours of daily recitation, found time to make each of them repeat, one by one, all the propositions contained in the arithmetic and geometry of the "Course of Bezout"; and to give the whole of this course a second and third review; so that a person who should listen with the most superficial attention, was absolutely dispensed from the necessity of opening his book. After having by these means, made a brilliant display on the day of their examination, the greater part of the candidates lost in a short time the theory which had been thus inculcated upon them without their privity, and were utterly incapable of acquiring it from books by themselves. I have thus known a naval officer, received into a high grade, unable to recal the arithmetical theory of fractions, three years after having left his school. In fact, the most of them have had the candour to confess, that it was, if not impossible, at least exceedingly difficult to them to understand any other works on mathematics, than the course which had been put into their hands; and they all appeared completely disgusted with an abstract study which only reminded them of the fatiguing repetitions with which they had been burthened.

The preceding remarks shew, if I do not deceive myself, that the instruction of these schools was

\* On the subject of Female education, there are many very excellent remarks in the BRIEF REMARKER, written by the REV. EZRA SAMPSON OF HUDSON. The work contains observations on the ways of man of sterling value. It deserves the perusal of every one, and will be found a useful work in every respect. To parents who wish to bring up their children properly, we recommend it.

not a guide to cultivate the love of Science, and that the pupils must have possessed great readiness of talent in order to concentrate the knowledge which they might have subsequently acquired.— Let me then again repeat, that the most profitable lessons are those which books give, because they are taken only when preparation has been made, or necessity calls for them, because they are relinquished when they become fatiguing and resumed when rest or an unexpected occasion has restored to the mind its curiosity or its strength, and because, while they add new knowledge to our stock, they put it in our power, to recal, at pleasure that which may have become effaced by circumstances or by time.

There is an age at which man can be taught only by himself, and, to give to this age its earliest date, is the proper province of education.

The course of instruction to which the candidates for public service are now subjected, is intended rather to strengthen their understanding and rouse in them a spirit of research, than to accomplish any of the practical purposes to which their knowledge may be applied; it serves also to distinguish among the great number of candidates those who present themselves, those who exhibit true talent, and from whom greater success may be expected on the rare but important occasions, where the more elevated branches of science are to be applied. It is not to be presumed that all the officers of a numerous corps will possess, in the same degree, each of the sciences upon which their education has turned. The difference of tastes must necessarily direct their minds towards those to which they have the readiest affinity.

According to these principles, then, the object of the examination preparatory to the admission of the candidates into the special school of the corps for which they are designed, should be to ascertain that they have observed with attention the different parts of the course through which they have been made to pass, and that they have effected all the operations of it in the order in which it has been presented them: the perfection and the preservation of their knowledge should be left to their facility, their taste, and to the circumstances in which they may be placed. Would it not be possible then to modify the examinations in such a way as to spare young persons the fastidious repetitions to which they are compelled by the existing form? and to be assured that they have traversed exactly step by step the career of instruction, without compelling them to clear its whole extent at a single leap? for they are now held to nothing less than this.— The first idea which presents itself is to oblige young persons to render a frequent account, of the lessons they have received, and to make frequent applications of them.



This expedient, which would fully answer its object, if the candidates were but few, becomes almost impracticable, when their number is very large. In this case, it cannot possibly have a place in instruction. The time which must necessarily be employed in answering a question relative to analysis or to geometry, on account of the calculations and the constructions which it exacts, is too considerable to allow the professor charged with directing and overseeing instruction, to interrogate his pupils individually, in a detail sufficient to shew with certainty, both the extent of their theoretic knowledge and their facility in effecting the calculations and the operations which flow from it.

The examiner, being obliged, in a very short interval of time, to multiply his questions so as to embrace the greater part of the subjects of the candidates, acquisition, cannot be less embarrassed: for if he abridge the trial by neglecting the applications, he will acquire no light respecting the facility of the pupils in this respect. If to these difficulties be added those which result from the effects of timidity in oral examinations undergone by memory, effects too well known and established by too conspicuous examples, to require them to be spoken of here, it will be allowed that this method of trial is often very uncertain.

It has been proposed to substitute for this an examination by writing, which gives the candidate more time to collect his thoughts, which diminishes the disadvantages of timidity and which from being simultaneous with all the pupils, allows the same questions to be put to each, and renders their answers more easy of comparison.

While it would be proper in all cases to diminish the length of examinations, whether oral or written, it would likewise be well to increase their frequency, in order that the pupils may lose no ground and may not defer the requisite study of the subjects of instruction, to a period so distant as to cause them to lose sight of the developements of their lessons. In vain will it be objected against a multiplicity of examinations, that some difficulty may be found in classing candidates of different degrees of acquisition—and who may be beyond an exhibition in the lower, but unfit for one in the higher grades. These reasons should oppose no obstacle, for although it may be said in favour of candidates of this description, that they have by obstinate labour, retrieved the time which they had lost, yet it is evident that the results of precipitate study are always fleeting, and that what are known the best, and remain the longest in the recollection, are the notions which have been matured by time and ripened by reflection.

The form of instruction as preparatory to the examinations which I propose is very simple, very well adapted to large schools and capable of con-

tributing much to the progress of science. An able professor, whose name and whose labours inspire confidence, gives to a course of lessons that just degree of developement, which supports the emulation of his hearers, and incites them to great exertions, while it prevents them from being discouraged by the difficulties that are to be overcome. Directed by his counsels, guided by his example, young persons who may be endowed with distinguished talent, and who merit to be put in reserve for the duties of the professorship, cause all the lessons of a general course to be publicly repeated with the greatest accuracy, by the pupils divided into a sufficient number of sections. The generation of masters will thus be perpetuated, and the pupils will be formed to an useful labour, because they draw from their own resources, all that it may produce;—for, let me once more repeat, that experience has proved to every man of judgment, that to know how to direct one's own mind in meditation, and to know how to study what has been already done, are the true and the only means of becoming prepared for any intellectual profession whatever.

It is singly to the production of this faculty that all education should be subservient, when it is given at a proper period of life; but unhappily the body of mankind are prevented from receiving in time, the education that may be needful to them: the professions to which they must be early devoted, do not leave them when young, sufficient leisure for the requisite attendance upon schools. These classes of citizens require books, and lessons, simply directed towards practical application, and consequently confined to a clear and exact exposition of rules; the best treatises then for their use are those which contain the most examples and the fewest reasonings. Books of this description which are to be considered as manuals to be rendered familiar by habit are very numerous in England, and this is probably the reason why instruction is more extensively spread among those who practise the arts in that country than in France.\*

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#### PESTALOZZI'S METHOD OF TEACHING RELIGIOUS AND MORAL PRINCIPLES, &c. TO CHILDREN.

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ON whatever plan a school may have been organized; whatever may be the situation of the scholars, or the nature of their studies, or the method of teaching, there cannot in any instance, be an objection to introduce, as an auxiliary, that which proposes to excite in the minds of children the affections and

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\* It is the chief blessing of the people of the United States, that this observation applies with additional force to them.



dispositions of which religion commands the perpetual exercise.

Pestalozzi, in the first place, by questions adapted to the tender age of the pupil, endeavoured to ascertain whether any idea existed in his mind upon the subject to which he wished to direct his attention; and from any one clear idea of which he found the child in possession, he led him on, by a series of questions, to the acquirement of such other ideas as were most intimately connected with that primary conception.\* Thus, for example, suppose that he found in the child an idea of the existence of a being whom he called God. He, instead of teaching him to repeat by rote the notions communicated by divine revelation on what constitutes the basis of all religious principle, proceeded, by questioning him to direct his attention to such of the evidences of the divine power, wisdom and goodness, as were immediately within reach of his perceptions concerning the unbounded love and all-directing providence of the Supreme Being. Clear ideas were in this manner obtained; and thus the infant mind was led, at an early period, to objects which cannot at any period of life be contemplated without producing correspondent emotions of reverence, gratitude, love, and veneration.

Having thus prepared the heart for obeying "the first great commandment," he, by leading to a consideration of the omnipresence of Deity, rendered the impression deep and permanent. It was thus that Pestalozzi laid the foundation for the belief and practice of the doctrines and duties of Christianity, when the faculties of the understanding should be sufficiently ripened for comprehending the importance of the truths that have been revealed. It was on the same principle, and by the same method of instruction, that Pestalozzi inspired his pupils with correct notions of justice, probity, and benevolence. The duty of doing to others as they would have others in like cases do to them, appeared, as it were, a discovery of their own, a truth demonstrated and unquestionable. Led also in the same manner to a perception of the utility of order, they became conscious of the necessity of adhering strictly to the rules and forms of discipline, essential to the preservation of that order, of which they felt the benefit and advantage. Instructed, and in a manner compelled to think and to examine the motives of their conduct, they learned to set a value on self approbation, confirmed by the approbation of those in whose wisdom they placed confidence.

\* This remark ought to claim the serious attention of every person concerned in the developement of the infant mind. The flash of light thrown upon the subject is sufficient to dispel the darkness that hovers over most places of instruction in our country; but the light begins to prevail, our schools are becoming better.

We may easily believe, that where the moral feelings have been rendered thus susceptible, the dread of losing the esteem of a revered instructor would impose a restraint more powerful than is imposed by terror of punishment.

A few particular methods, judiciously planned, and carefully practised, may be made habitually to exert the minds of youth in the acquirement of clear and accurate notions concerning all the objects of perception which can be brought within reach of their observation; and thus their mental powers, instead of being suffered to remain dormant, will be gradually developed and improved, and rendered capable of being exerted on other objects.

The principle adopted and adhered to by Pestalozzi is in its nature universal and may be universally applied. It is neither deep nor intricate, nor beyond the comprehension of the most ordinary capacity. In a few words, it is simply attending to the laws of nature. By these it has been ordained, that the human understanding, though it may be generally opened, and enabled to embrace a vast extent of knowledge, can only be opened gradually and by a regular series of efforts. Pestalozzi perceiving, that when one idea upon any subject had been acquired by a child, the next in succession was no sooner presented than imbibed; and also observing that when it was attempted to force upon children, ideas having no connexion with any that had previously entered their minds, the attempt proved fruitless, took the hint from nature, and wisely formed his plan in conformity to hers. Instead of making children repeat words that suggested ideas to his own mind, he set himself to observe what were the ideas that actually existed in theirs. He then, by questions adapted to their capacities, induced them to make such further exertion of their powers, as enabled them to add new ideas to their slender stock, and by persevering in the process, expanded their faculties to a degree, which, to those best qualified to judge of the difficulties of the abstruse sciences he professed to teach, seemed little short of miraculous.

The means employed by Pestalozzi to improve the heart and dispositions, are extremely simple and extremely obvious, yet, simple as they are, and infallible as is their operation, many and obstinate are the prejudices that must be surmounted, ere we can expect to see them generally adopted. The effect resulting from them, as exemplified in the school of morality, is what has been termed by our old divines, the *practice of the presence of God*. Other children are taught to say, that God is ever present; but the pupils of Pestalozzi are taught to know and to feel in their hearts, that "in God they live and move and have their being." This conviction is impressed and rivetted in their minds, so as never to be for a single moment obscured, nor does this



belief produce in them the slavish fear which so naturally leads to a gloomy superstition: neither does it produce any tendency to that enthusiasm which expands its fires in the fervid and useless blaze of ecstasy. It is productive simply of the feelings of reverence, and gratitude, and love, accompanied by the sense of the divine protection which inspires courage and confidence, and that ardent desire of divine approbation which leads to the practice of every virtue.

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*For the Academician.*

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GENTLEMEN,

THE person now addressing you has the satisfaction of regularly perusing the columns of the Academician, and highly appreciates the importance and utility of the great objects it has in view, devoutly wishes the amplest success may attend the meritorious exertions of its editors.

Convinced that any contributory attempts of those actuated only by friendly sentiments, will be viewed by you in its proper light, the writer does not wish to ingratiate himself into your good opinion by other means, than the demonstration of the purity of the principles under which he writes, and their tendency to promote the attainment of the grand desideratum of your views.

Every American capable of estimating the intrinsic value of the form of government, and inherent excellencies of the institutions under which we live, cannot but be impressed to conviction, with the belief that the surest, the most efficient means of preserving to ourselves and transmitting to our future generations, the enjoyment of all the blessings of civil and religious liberty that we now enjoy, are to be found almost exclusively in education. How few persons who have attained the age of thirty, and with it the *disposition to reflection*, are there, who will disclaim the influence that education has had in the formation of their own characters and dispositions; and who, if they strictly examine themselves but must acknowledge that they perceive a radical defect in the system under which they were brought up: that although they may have become proficient in some points, and perhaps perfect masters in others, still, they cannot but accuse themselves of not having *improved their hearts*, with the same success that they had furnished their heads. The writer takes it for granted, it will not be hastily denied, that upon the improvement of the heart, depends in a great degree our capacity for high rational enjoyment: and that the stability of every thing in this life which can become a source of permanent enjoyment, is as dependent upon the proper cultivation of the heart, nay more so,

than upon the embellishment of the understanding; which is strongly exemplified in the selection of the individuals by our Saviour, for the prosecution of the works of his ministry.

The ruling passion of the present age (love of money) threatens the subversion of every moral principle, and by it, men are becoming every day more and more incapacitated for the appreciation of right and wrong, unless accompanied by their idol self-interest; it is much to be apprehended that the time is not far distant when every other avenue to the human heart will become closed, and the brightest attributes of the "master-piece of nature's workmanship," denied their genial influence.

It becomes a cardinal duty, with every virtuous reflecting man, to use his utmost endeavours to preserve the original integrity of our political institutions: they were formed upon a basis of the best experience of that day, and the principles which gave rise to them need not recoil from a comparison with those, ever yet professed or announced by any set of men, the fruit of whose labours has been transmitted to the present, and the knowledge of which is now only to be gained from the pages of history. The preservation of these institutions in their present purity will not continue firm from their inherent qualities alone; the mass of every society, the majority of the nation at large, must not only be willing, but also capable to appreciate all the advantages under which they live: the means are amply within our attainment, and will be found concentrated in education.

It is more than superfluous to say, that great wealth is perfectly compatible with the well being of every institution of a republic; the history of every nation contradicts the assertion; the daily experience of the human heart, pointedly affirms the falsity of such belief; and was testimony required to support the hypothesis, that man corrupts every thing upon which he lays his hands, reference might be made to his abuse of the Christian religion, which being the greatest instrument of his happiness, has been, not unfrequently made the instrument of his greatest calamities.

The means by which mankind are to be prepared for the enjoyment of the purest system of rational liberty hitherto known to have been presented to their acceptance, are within the grasp of every one, (comparatively speaking;) for the number in the United States is very small indeed, of those who are totally excluded from all opportunity of imbibing the fundamental principles of the Christian Religion, at the time when their minds shall be capable of application to the system requisite for any proficiency in education; to commence and continue which, with a prospect of final success, "the physical leaven," we all have to contend with, must first be checked and then subdued.



A conviction of our dependence on the Great Author of our being, is a primary step to the acquisition of the knowledge of ourselves, upon which depends all success in *tutoring the heart*; the disposition and ability to perform this, is more essential to improvement in ethics, and the consequent expansion of our capability of rational enjoyment, than many persons are fully aware of: neither do we seem apprized of the importance of a timely acquaintance with this faculty: the number of persons who appear not to be conscious of having it at all in possession, may perhaps, be said to be as great as the number who have already run their race without having once demonstrated the operation of its invaluable influence.

To possess a knowledge of the disorders incident to the physical existence of man, and of the remedies applicable to his relief under those disorders is justly considered highly meritorious; very few individuals of the human species who have not been taught, by the best of teachers, their own experience, that they are daily liable to a thousand casualties, by which they may be rendered subjects for the application of this admired knowledge; and when prostrated on a bed of sickness, how forcibly must the inefficacy of their self-efficiency impress upon their minds the conviction of insignificance.

How few of us are there, who consider ourselves as composite beings; (a) made up of body and mind, and who have given an equal attention to these two parts of our being.—For the body the utmost care has been manifested, both to cure and to prevent the disorders to which it is subject; but to the mind, the same solicitude to discover the art of remedying its disorders or complaints, has not been manifested, and its practicability, though demonstrable, is less attended to, has fewer advocates, and is not even without its enemies.

The question naturally presents itself—(b) Does this difference arise from the power the mind possesses of judging rightly of its own complaints without reference to the actual state of the body, which can at no time become acquainted with the sufferings of the mind itself; but when attacked by indisposition, its natural functions being suspended, it is not possible that it should judge rightly of its own condition. We are so formed by nature, that the feeble rays of light, with which she has indulged us, cannot suffice alone, to lead us happily through this life: their glimmering soon becomes extinguished by the effect of the errors of prejudice and the corruption of manners.—Study and knowledge therefore, become indispensably requisite for our guidance.

It cannot be denied that we feel within ourselves a capacity for virtue, and poor indeed! must be that

heart which does not dilate with inexpressible satisfaction at recognizing this principle within it, which if cultivated must naturally lead to a happy life; prevent the encroachments of falsehood upon truth; support the influence of nature within our breasts, against attacks from prepossession; preclude the baneful influence of avarice, the deleterious effects of luxury, and if rightly understood and managed will be found a panacea to the moral aberrations of the mind; the cure of whose complaints should always, at least, be attempted, though they are, trivially, too frequently thought less hurtful than those of the body.

The diseases of the mind (c) are not only more dangerous but more numerous than those of the body, which always more or less, disturb the mind's tranquillity. "Devoured by impatience, we uselessly sigh away our time in endless desires."—This happens, he says, when we give ourselves up to chagrin or to ambition; two distempers of the mind, which, without mentioning others, surpass in poignancy the most violent diseases that attack the body: which being indebted, for the cure of its disorders, to the mind, is it credible that the latter cannot also relieve its own complaints! Which seems less probable, inasmuch as the cure for the body often depends upon its constitution, and that, the wit of the physician is not always a sure guaranty of his success, whereas every mind which shall be truly desirous of its cure, and will obey and follow the precepts of the wise, will infallibly succeed.

Yes! without doubt, Christian Philosophy is the true medicine of the mind; for which such extraneous aids need not be sought, as those which act upon the body; it being only necessary that we should render them salutary to us, by not neglecting any thing which depends upon ourselves.

Thus, I conclude, the permanent enjoyment of the blessings of every moral and political institution in the purity which the mind of man is capable of creating it, depends upon the nurture and right culture of his capacity for VIRTUE; the means for the attainment of which are to be found in Education.

HORTA.

## PHILOLOGICAL DEPARTMENT.

GRAMMAR. Continued from page 203.

### CHAP. VI.

#### Of Verbs.

#### SECT. I. The Nature of the Verb.

THE verb, as exhibited in elementary grammars, especially those of the Greek and Latin, is much more varied than any of the other parts of speech. Some ingenious attempts have been made to trace

(a) Cicero. (b) *ibid.*

(c) Cicero.



its complications, and to analyse its different forms. We find the offices performed by words called verbs to be various, and it would be satisfactory to discover the cause of the application of one common term to words so diversified.

The following are the queries which this subject suggests. Does the verb perform any office which is peculiar to itself, and is this common to every word which, in the present practice of grammarians, receives the appellation of a verb? Are there more points of coincidence than one in the application of the various forms of the verb? Is this coincidence in office strictly universal? Or are these different offices sometimes united in one verbal sign, while only one of them is performed by others? Are the offices performed by the respective words called verbs thus different among themselves? Are there any functions common to the verb with some other parts of speech, though more advantageously and more frequently performed by verbs than by these others? Does this circumstance render it advisable in any instance to retain the name of verb, even while the office performed by it is not peculiar? Or ought scientific accuracy to concur with convenience in leading us to alter in this instance the nomenclature of the parts of speech? These questions can only be answered by investigating the nature and use of every sort of word which, in the habitual language of grammarians, is denominated a verb, and making a comprehensive survey of their applications, in order to assign to all of them respectively their just rank in universal grammar. We must therefore suspend the discussion of the leading problem implied in the title of the present Section, and leave the reply to be gradually unfolded in the sequel of this Chapter.

One important form of the verb, the imperative, created by the earliest occasions for the invention of language, has already come under our notice. We have found imperatives to be the shortest of all words, and to consist of the roots from which the greater part of other words derive their origin. But, since we have considered all language as imperative, that subject does not form an appropriate commencement to our inquiries into the peculiar nature of the verb; and, in fact, it scarcely requires any additional observations to those already made on it. Many verbs from their meaning do not admit of direct imperatives, (to wit, those which do not signify the voluntary acts of mankind,) yet possess many forms in common with active verbs.

We shall first consider those forms of the verb which are subservient to affirmation, or, as it has been sometimes termed, *predication*, for the sake of including negations.

#### SECT. II. *Verbs as subservient to Assertion.*

ASSERTION or affirmation is the act peculiar to

the verb, being never performed by any word which grammarians have referred to a different part of speech. That part of the verb by which it is most evidently and most frequently performed is called the *Indicative*. By means of it we convey information. This, though not the original object of language, is by far the most frequent application of it, especially in an improved state of society. It proceeds from that great characteristic of our species, the love of knowledge, implying an inclination to convey it to each other. It is by means of affirmation that language becomes the instrument of the most important improvements in human thought and in the character of society. An inquiry into its nature must therefore throw considerable light both on thought and on language.

In affirming, we connect different ideas together, and thus dictate an arrangement which we wish such ideas to assume in the mind of the person addressed. To this object a particular part of speech is devoted; but that part of speech often consists of a word which contains a sign of various other ideas. When we say, "the man walks," the word "walks" contains the name of a particular motion, at the same time that it expresses a connection betwixt that motion and the object denoted by "the man."\* Mr. Tooke considers the verb as containing a noun and something more; and he proposes it as a question worthy of the attention of philosophers, what is that circumstance which, when added to a noun or the name of an idea, makes it a verb? The answer to this, in so far as the indicative is concerned, is, that it contains a sign of asserted connection betwixt the object expressed by that noun or name, and some other object which is also mentioned in the sentence. But we have other signs of connection which are never considered as giving a word the nature of a verb. The genitive case implies a sign of connection betwixt the object expressed in that case and some other; the adjective performs a similar office; but there is a difference betwixt these signs of connection and that implied in the indicative of the verb.

The nature of these two sorts of signs, and the difference betwixt them, will be most clearly perceived by attending to the structure of those languages which enable us to resolve the indicative of every verb into its constituent parts, by affording distinct signs for each. In English "the man walks" may be resolved into this sentence, "the man is walking." The termination *ing* implies a connection similar to that expressed by the genitive case or by the adjective, while the word *is* gives the sentence the character of assertion, and fits it for conveying new information.

\* For a particular illustration of this principle, see the *Juvenile Expositor*, by the Editors.



For the sake of possessing appropriate terms on this part of the subject, it will be convenient to borrow the technical language of logicians, who call a sentence a *proposition*, consisting of three parts, a *subject*, a *predicate*, and a *copula*. In such a sentence as we have now mentioned, each of these parts is expressed by a separate sign. "The man" is the subject, "walking" the predicate, and "is" the copula. The author of GRAMMAR in Dr. Rees's *Cyclopædia* maintains, that "is" does not express assertion, but connection. Connection however, is often expressed by words of very different import, therefore that term is less appropriate to the copula than assertion.

### SECT. III. *The Substantive Verb.*

THE copula has been denominated the *Substantive Verb*, and it undergoes a variety of changes, called inflections, corresponding to the changes incident to other verbs.

The radical nature and common use of this verb is not, as Mr. Harris supposes, to express existence, but to assert a connection betwixt one object and another. The author now mentioned has been unfortunate in his mode of describing the use of this verb. He pronounces it an undoubted axiom, that "an object must first BE, before it can be ANY THING ELSE;" an opinion in all points of view untenable. In the first place, it is not necessary that the subject spoken of should have an actual existence. We can speak of supposed as well as of existing objects. In the next place, an assertion that any object which has existence is something else, implies an absurdity.—What then is an assertion? Do we by means of it assert an object to be the same that is implied in the term used for an introductory designation? This is not the case; it would form an unmeaning truism; and the predicate is generally a different word from the subject. In this act we neither assert the subject to be the same, nor to be something else. The office of assertion consists in pointing out a relation betwixt the subject and some other idea. The word "gold" has one meaning, and the word "metal" has a different one. When we say "gold is a metal," we do not intend to say that the words "gold" and "metal" have the same meaning, but that the qualities expressed by the word "metal" are connected with the object called "gold." When we say "sugar is sweet," "wormwood is bitter," our intention is to produce in the mind of the person addressed, a connection betwixt the ideas which have been previously attached to the word "sugar," and the further idea of "sweetness," and betwixt the ideas attached to "wormwood," and the idea of "bitterness." Sometimes nothing may be previously known concerning the subject of the proposi-

tion. We may speak of sugar and of wormwood to a person who has never heard of either. In that case the terms are only introduced as signs requiring the person addressed to attach to the one of them the idea of sweetness, and to the other that of bitterness, as contributing to those compound ideas of which he may afterwards consider the words as significant. The idea expressed in the subject must always be different from that expressed in the predicate. This is the case even though the expressions used would on a different occasion be synonymous. When the sentence, "London is the capital of Britain," is uttered, if the hearer had any ideas about London, he is desired to connect with these the further circumstance of its being the capital of Britain: if he had no idea on the subject, except that London was a name written or pronounced in a certain manner, he is desired to connect this word as a name with those which form the predicate of the sentence. Sometimes, by a figure of speech, the same word is used for the subject and the predicate: for example, "Home is home." In the employment of this figure, however, it will be found that such a word as "home" in these two situations has a different set of ideas attached to it. The meaning of this sentence is, "Home, though often thought and spoken of with indifference, is, when made the subject of reflection, connected with feelings which interest and attach us."

The substantive verb differs from verbs of motion in being radically indicative in its character. Assertion is the cause of the contrivance of it. It does not originate in the imperative mood, any further than an imperative effort to command attention is implied in all language. The use of the substantive verb is, to direct the thought of a person to the connection of one idea, or one assemblage of ideas, with another, and thus to indicate congruities, incongruities, and relations of all kinds. The substantive verb is employed in the imperative; conformably with the usages of other verbs. We say, "be wise;" "be ready to do your duty;" but this imperative has always an awkwardness and a want of emphasis, compared to that of the active verb. An active imperative may be considered in such phrases as understood. It seems an absurdity to desire any person or thing *to be*, or even simply to be connected with another object, or to be endowed with a particular character. The imperative radically implied in such sentences is a command or solicitation to use such *exertions* as tend to the production of a certain state. *Sis probus* means *fac ut sis probus*, cause yourself to be good; act in such a manner as to support a worthy character.

All the other forms of this verb coincide in meaning and emphasis with the corresponding parts of other verbs.

The peculiar character of the indicative of the



substantive verb is, to express in a separate word that general act of the mind which is common to all verbs in the indicative mood.

The *predicate* of a proposition may either be an adjective noun, as "Cicero was *eloquent*;" Solomon was *wise*;" or a participle, as, "the man is *walking*;" "the boy is *riding*." A substantive is applied with equal frequency to the same use, as "Isaac is a *philosopher*;" "George is a *king*;" "Alexander is an *emperor*;" A connection betwixt the ideas expressed by these substantive nouns and those attached to the *subjects* of the propositions, is then asserted by means of this simple verb. The verb still merely serves the purpose of a copula. The noun becomes an adjective by its situation.

Dr. Smith infers from the generality of the character of this verb that it must have been the result of much thought, and could have been formed only after refinement in metaphysical science had made considerable advancement. For this inference, however, there is not sufficient foundation. The acts exerted in all assertions have a character mutually similar, and are therefore called the same act; and nothing is more natural than to express the same act or similar acts by the same sign.

The early attempts of a child to speak are often made without the use of the substantive verb. He says, "That bread good," instead of "that bread is good." He possesses the ideas of bread and of goodness, and, by pronouncing the one in immediate succession to the other, he attempts to convey the impression which he has received of their mutual connection. The same mode of speaking may be supposed to take place among a people, whose mutual communications are few and crudely executed. But, as the juxta position of nouns may also be applied to other uses, a separate sign is afterwards introduced for indicating assertion; and no depth of metaphysical knowledge is required to induce men to use the same sign on every similar occasion. Although some risk of error attends the intellectual exercise of retracing and analysing the progress of our mental operations, and hence metaphysical mistakes and difficulties have been handed down from age to age, no hesitation or impediment occurs in the employment of the faculties for the common purposes of speech. The human mind has always proceeded without embarrassment in contriving signs for its communications. The formation of a general word is equally easy with that of a significant general termination for shewing that words are applied to similar uses. A termination expresses some point of mutual resemblance in the application of words. The same thing is done by a separate word, and a separate word may be uttered with equal facility. The forms, in fact, which are common to all other verbs are exactly synonymous with the pure substantive verb. All other verbs consists of

the signs of ideas, coupled, as we have observed, with the sign of adjection, and the sign of assertion; that is, the meaning of the participle with that of the copula.

#### SECT. IV. *The Neuter Verb.*

SOME languages have verbs which contain the meaning of an adjective and the copula condensed in one word, and which have no further characteristic in the construction of sentences than these parts of speech when separately expressed. Perhaps this is not the case with every language, and there are probably none in which such verbs abound. In the Latin language, *rubere*, *vivere*, *calere*, *frigere*, are instances. In English we have the verbs "to glow," "to blush," but we for the most part express such ideas by using adjectives with the substantive verb in a separate state. The verbs now mentioned are called *neuter* verbs, in consequence of the absence of certain qualities which we shall find other verbs to possess.

#### SECT. V. *Assertions made by Verbs of Motions or of Action.*

It has been already observed that the first object which a man has in view, in using speech, is to excite to action. Were mankind destitute of vocal language, they would imitate the particular actions which they intend the person to whom they speak to perform. This is always done by persons who wish to converse while they are not acquainted with any common language. The case is necessarily the same with dumb persons. In tracing the origin of the words by which particular actions are represented, and the establishment of them as conventional signs, we find no general principles to guide us. The motive for using a particular sound is of so casual a nature, that its history is lost before it receives an established application. The want of written documents, and the total inattention to retrospective analysis, which exist in a state of society so rude, involve the origins of words in obscurity. Etymology can only trace a word from one application to another, and follow its variations through the different languages into which it has been adopted. Even this exercise is liable to deceptions which it is difficult to avoid. Yet it must be allowed that, when conducted with caution, it may prove extremely useful, by discovering analogical principles of transition, which elucidate this department of human art.

After men have learned to employ words for exciting one another to those actions by which reciprocal services are performed, the extent of the uses to which language may be applied must be soon more fully perceived. Men contrive to describe to



each other various surrounding phenomena. Some of the most interesting of these consist of the actions of their fellow creatures.

The same sign by which we desire a person to perform a particular action, is naturally retained as a symbol of that action in describing any series of events of which it forms a part. After we have used the words "come," "go," "stand," "sit," "run," as imperatives, we spontaneously apply the same words, either in the same form, or with some slight addition or alteration, in affirmative sentences, such as "John stands," "John sits," or "John runs."

It has been already remarked that these indicative forms may be resolved into the copula with a participle, and are equivalent to "John is standing," "John is sitting," and "John is running." The connexions expressed by the participle are observed in the operations of the solitary mind before we are capable of using language, and form an extensive series of relations among the objects of our knowledge. But the earliest use that arises for connecting the significant words is the conveyance of information. On this account the copula and the participial sign are not originally separate, but condensed into one word with the name of the action specified. This early date of the condensed phrase is the cause of a comparative simplicity in the indicative form. It is prior in formation to the participle. We have occasion to say that a man "walks," sooner than we have occasion to use the compound designation "the man walking," as the subject of a different proposition. It follows *a fortiori* that the simple indicative is prior to that indicative which is formed by the participle and the copula. The division of it into these two parts might make the indicative appear more complicated in metaphysical analysis, and some might be disposed, on this view of the subject, to consider the usual indicative as a species of contraction. But this is not its character. The act which consists in the union of the meaning of these two signs is spontaneous, and of an early origin. On this account the indicative has even less complexity of form than the participle.

#### SECT. VI. *The Active, Passive, and Middle Voices.*

It most frequently happens that, in describing an event, whether consisting of a voluntary human action or not, we have occasion to bring into view, by means of a noun, some object which has a conspicuous concern in it. The occasions on which no inclination to do this exists are but few, and the events which are described in a manner so simple are not of the most interesting kind. They occur in Latin in the use of such verbs as *ningit* and *pluit*, "it snows," "it rains." Each of these verbs,

without any nominative, contains a full account of an event.

When we describe an action which has an intimate connection with some other objects, we generally have occasion to extend our description by the mention of the object or objects so situated. We may either mention one or more of the agents who perform the action, or an object affected by it. If the noun expressing this object is put in the nominative case, it becomes the leading subject of the sentence.

When the nominative is the name of an agent, the verb is said to be *active*. When it is the name of an object affected, it is said to be *passive*. (This mode of expression is somewhat illogical. It is the noun that becomes *active* in the one instance, and *passive* in the other. The difference of these two uses of the verb is, that they give these differences of character to the noun. We shall, however, adhere to the established nomenclature, as established by common usage, and possessing the advantage of a convenient briefness.) There are not in every language two separate forms of the verb for these two applications of it. In modern English, some verbs are used in the same form in an active and in a passive application. We can use the verb "cut" in any one of the three following ways: "They *cut* the tree;" "These tools *cut* smoothly;" "Fir *cuts* more easily than oak." We say, "Look at that person's face:" also "He *looks* well;" "Drink some wine;" and "This wine *drinks* pleasantly."

Some grammarians, impressed with the prominent distinction existing in the Latin language betwixt the verb in the active and the passive voice would insist that "to drink" and "to cut" are essentially active, and therefore that the phrases "fir cuts easily," and "this wine drinks pleasantly," are ungrammatical. But we shall probably entertain a more enlarged as well as a more correct idea of the verb, by conceiving that those which we call active verbs are in their earliest application of no particular voice, though, from the agent generally appearing in the mind of the speaker more important than any object acted on, the active application of them is the most frequent. The original indicative of the verb thus points out a connection betwixt an object and an event, without specifying the nature of this connection. The circumstance of agency or any other may be safely left to the inferences formed by the understanding of the hearer.

In other instances, it is found convenient to contrive a mode of expressing by some slight alteration in the form of the verb, the circumstance of being the object acted on. An expression of this sort, if found to harmonize with the genius of a language, may be afterwards universally adopted; and the original form of the verb will then be lim-



ited to the active application. In such languages the distinction betwixt the active and passive voices will be most constant. This happens in the Latin language, and in the active and passive voices of the Greek. But, where the contrivances adopted for this purpose are in point of convenience less fortunate, they will be more varied and less strictly adhered to. Much will be left to urgent occasion or individual taste. Of this we have instances in the middle voice of the Greek verb; and in several phrases in the modern languages of Europe.

The French apply the verb in a passive acceptance, by introducing the same object as the nominative and the accusative to it, as, *Le vin de Bourgogne se boit partout*, literally "the wine of Burgundy drinks itself every where." A verb thus used has been called a reciprocal verb, and it appears particularly appropriate when the same object is the agent and the object affected, as in the phrase "he prepares himself." Yet it is not necessarily limited to such occasions. *Le vin boit* does not mean "the wine performs the act of drinking," but "the wine has some connection with the act of drinking." The nature of that connection is here indicated by the accusative *se*. The phrase *le vin se boit* may be thus analysed, "The wine is concerned in drinking, by being the liquor which some one drinks." But we find that in English, when we say "the wine drinks pleasantly," the kind of connection betwixt the wine and the act of drinking is left to be inferred from the nature of the subject. This is of itself sufficiently prominent to prevent ambiguity, notwithstanding the incomparably greater frequency of the active application of that verb.

In other instances, a slight addition or a mere alteration is used for denoting the passive. In the Icelandic language, *æg elska* signifies "I love," *æg elskast* "I am loved." In Latin, we have *amo* for "I love," and *amor* for "I am loved." The expedient adopted in different languages will depend on the previous state of each. When a language already possesses a word expressive of suffering or being acted on, it will be natural to employ this, or some part of it, in union with the verb to denote the passive. It is not improbable that the letter *r*, which distinguishes the passive voice in Latin, is derived from *res* "a thing," or some previously existing word of similar import. The radical letters *am* signify "love;" *am-o* "I love," i. e. "I have some general connection with loving." *Am-o-r* "I am connected with loving as the thing or object loved." The letter *r* runs through all those forms of the passive voice which are produced by inflexion, with the exception of the second person plural.

The preterite tense of the passive verb in Latin is made up of a compound phrase, consisting of the

participle with the substantive verb. The participle employed is derived from the past tense. *Amatus* is most probably a contraction for *amavit-us*, and derived from *amavit*. The past tense is thus converted into a part of speech resembling the adjective; and the effect of the past is exhibited as a quality which is to be connected or adjectived to some other idea expressed in the form of a substantive noun. The introduction of the copula forms an indicative or asserting sentence. This shows that assertion was not early appropriated to that particular sort of connection betwixt actions and other objects.

The best passive form of the verb which the English language possesses is in the preterite tense, and yet it is of an equally compound nature with this part of the Latin passive. We adopt the sign of past action in the form of an adjectived quality, and complete our assertion by inserting the copula. "Destroyed" is the past tense of the verb "destroy," "The enemy's troops destroyed the city" expresses the active voice. "The city is destroyed" expresses the passive.

We have no good contrivance for a passive voice in the present indicative. *Domus ædificatur* cannot be literally translated into our language. When we say "The house is built," we assert the completion of an action. The nearest approach which we make to it in respect to tense is by the phrase "the house is building;" but here we confound the voices, at least we employ a word which in respect of voice is general, as the participle in *ing* is most commonly used in the active voice. Some of our southern neighbours choose to express their meaning by the phrase "the house is being built," which is no farther appropriate to the present tense than as the same combination never happens to be used for the past. It labours under the disadvantage of an awkward verbosity, which prevents it from being generally adopted, or sanctioned by the authority of persons of taste. Another effort has sometimes been made to supply this want by prefixing the letter *a* to the present participle, and thus converting it into a passive present, as "the house is *a*-building," but this has not succeeded in meeting with a permanent adoption. A strictly appropriate phrase has not been found absolutely necessary, because a slight alteration in the form of our sentence enables us to dispense entirely with the passive form of the verb. We can say "the building of the house goes forward," or "the work people are engaged in the building of the house." No inconvenience is experienced in expressing our meaning; it is confined to our attempts to translate Latin sentences literally into English.

In the French language the passive voice is much less frequently used than in English. That language has a resource which few others possess, for



introducing the object acted on after the active verb without the mention of any particular agent, as it has a nominative of a very general application, *on* or *l'on*, signifying merely "some being or beings real or imaginable." This is prefixed to the active form of the verb, and the object acted on is conveniently made to follow in the accusative (or objective) case. *On le dit*, "some being or beings say so," is translated, with propriety "it is said."

Our language is equally defective in a passive voice for the future as for the present. If the sentence *domus edificabitur* is translated by the phrases "the house will be built," or "the house will be building," or "a-building," or "will be being built," we shall find these forms to labour under the same disadvantages with the attempts already mentioned to give a translation of the words "*domus edificatur*." Yet we experience equally little inconvenience in this as in the former instance, because a moderate skill in varying the turn of our sentence enables us to convey our meaning clearly without the use of a passive voice.

A neuter voice might be formed, consisting of a separate word to signify that an action takes place, in a manner similar to the words *ningit* and *pluit*. We might have a single word for "there is," or "there was a walking;" in French, *l'on se promene*. In Latin, the passive voice is sometimes used in this neutral or impersonal manner. *Ambulatur* is not passive in any thing else than in form. It means "the act of walking goes on;" *ambulatur ab illo*, "the act of walking is performed by him," for "he walks."

## ARITHMETICAL AND MATHEMATICAL DEPARTMENT.

### OF DIVISION.

(Concluded from page 204.)

When the divisor contains several figures, some difficulty may occur in ascertaining how many times this number is contained in the partial products. The following example is designed to shew how this may be attained.

$$\begin{array}{r}
 485) 423405 \text{ (373)} \\
 \underline{3880} \\
 3540 \\
 \underline{3895} \\
 1455 \\
 \underline{1455} \\
 0000
 \end{array}$$

Four figures must first be taken on the left of the dividend, in order to form a number large enough to contain the divisor; and then it does not immediately appear how many times 485 can contain 4234.

As an aid in this search, it is to be observed that this divisor is contained between 400 and 500; and that if it were precisely either one of these numbers, the question would be reduced to finding how many times 4 hundreds or 5 hundreds are contained in the 42 hundreds of the number 4234, or in fact, what amounts to the same thing how many times the number 4 or 5 is contained in the number 42. The first gives 10, the second 8; the quotient sought will then be found somewhere between these two. It is plain that the number 10 is not to be used, because that would proceed upon the supposition that the units of the rank above the hundreds of the dividend, could contain the divisor, which is not the case; it only remains then to try which of the two numbers 9 or 8, employed as the multiplier of 485, will give a product that may be subtracted from 4234, and it is found to be 8: this then is the first figure of the quotient. Subtracting from the partial dividend the product of the divisor multiplied by 8, the remainder is 354; by bringing down the 0 of the tens of the dividend, a second partial dividend is formed upon which the same operations are to be performed as upon the preceeding, and so on with the others.

The foregoing articles furnish this rule! To divide one number by another; place the divisor on the left of the dividend, separate them by a line and draw another on the right of the dividend, to mark the place of the quotient. Take on the left of the dividend as many figures as are necessary to contain the divisor; seek how many times the number expressed by the first figure of the divisor is contained in that which is represented by the first or the two first figures of the partial dividend; multiply the quotient which is but an approximating one, by the divisor; and should the product be greater than the partial dividend, take away successively as many units from the quotient as may be necessary in order to obtain a product that may be subtracted from the partial dividend; perform the subtraction, and if there remain more than the divisor, it will be a proof that the quotient has been too much diminished; it is of course then to be increased. Bring down, by the side of the remainder, the following figure of the dividend; seek, as before, how many times this partial dividend contains the divisor; write in the quotient, the number found which is to be multiplied into the divisor, in order to subtract the product from the partial dividend; proceed thus until all the figures of the dividend proposed shall have been brought down. Should a partial dividend occur which will not contain the



divisor, it will be necessary, before bringing down a new figure of the dividend, to place a cypher in the quotient.

The operations which division requires may be included within a smaller space, by carrying the subtraction of the products of the divisor by each figure of the quotient in the memory, as may be seen in the following example.

$$\begin{array}{r} 39 \overline{) 1755} \quad (45 \\ 195 \\ \hline 000 \end{array}$$

After having found that the first partial dividend 175 contains 4 times the divisor 39, the 9 units are first multiplied by 4 which gives 36; and in order to subtract this product from the units of the partial dividend, 4 tens are added to the 5 units that it contains, which makes 45; subtracting 36 from this, there remains 9. The 4 tens are then carried mentally to 12, the product of the quotient by the tens of the divisor, which makes 16, and in subtracting it from 17, the 4 tens by which the units of the dividend were increased, in order to make the former subtraction possible, are likewise taken away. The same operation is performed upon the second partial dividend 195, thus: 5 times 9 are 45, taken from 45, nought remains, then 5 times 3 are 15 and 4 tens to be carried make 19, taken from 19, nought remains.

The mode of conducting any other example however complicated may be easily gathered from this. Division may likewise be abridged when the dividend and divisor are terminated by several cyphers, because, as many cyphers may be omitted at the end of each as there are in that which contains the fewest. If it were required, for instance, to divide 84000 by 400, these numbers might be reduced to 840 and 4, and the quotient would not be affected; for no change will have taken place except in the name of the units, since instead of 84000 in 840 hundreds, and of 400 or 4 hundreds, we shall have 840 units and 4 units, and the quotient of the numbers 840 and 4 remains always the same, of whatever kind their units may consist.

It is proper likewise to remark that by omitting two units on the right of the numbers proposed, they have been divided, each by 100; for it follows from the principle of numeration, that by removing 1, or 2, or 3 cyphers from the right of any number, the number is divided by 10, or by 100, or by 1000, and so on in succession.

Examples of Division according to the French method, the divisor being written above the quotient, and the products being carried in the memory.

144	3	16512	344	8049164	6274
24	—	2752	—	53956	—
00	48	0000	48	37644	486
				00000	

Division and Multiplication, like subtraction and addition, serve to prove each other, since according to the definition of division, a product being divided by one of its factors should give the other, and the multiplication of the divisor by the quotient should reproduce the dividend.

#### LITERARY INFORMATION SOLICITED.

Gentlemen who have it in their power to furnish the Editors of the ACADEMICIAN with the state of literature and science, in the various parts of the United States, would perhaps contribute in no small degree to the benefit of the community, and aid in the diffusion of literary intelligence which would be highly acceptable to the friends of scientific and christian education.

The leading features of this design are to promote the interest of literature and science, and to lay before their readers the growing state of education in our happy and flourishing country.

In order to render their journal interesting and complete, it becomes necessary, that they should ask information on the subject, from those who are enabled, by their connection with the institutions over which they preside, to give full and correct details, and thereby serve the cause in which they must feel a deep interest.

From school committees, societies and literary persons, the editors request the following particulars, viz:

1. The origin, progress, and PARTICULARLY THE PRESENT STATE OF SCHOOLS AND COLLEGES. The number of presiding officers, and their names:—course of study, &c.
2. Legislative or corporate encouragement.
3. Manner of government, how administered.
4. Professorships, number of professors and tutors.
5. Number of students in each place of learning.
6. The expenses of tuition, board, &c.
7. Society of students for literary improvement, rules, regulations, awards or distinctions.
8. Philosophical apparatus, library, &c.
9. Description of the buildings, and their site—of the city, town or village in which they are situated, and of the adjacent country, &c.
10. Names of students who excel at the annual examinations;—reports of the examining committees, premiums, rewards, &c.
11. An account of the rise and progress of theological societies and institutions—Sunday schools, &c.

These inquiries are applicable to public and private schools, endowed academies, colleges and universities.

From this enumeration, the desired information will be perceived. The editors request their correspondents not to limit their communications to the particulars of this list, but to include every thing they may deem worthy of remark—As the object is to obtain facts, it will therefore be deemed indispensable, that the real name of the writer be given, though it will be optional with him, whether it be published or not.

The advantages of a journal of this nature, are many and obvious. Literature and science will find new advocates by having their repositories opened to public inspection. Public spirit will be awakened and promoted, by exhibiting the laudable views, exertions, and liberality of those who are the friends and patrons of seminaries. Our youth will be benefitted and rendered useful members of society. They will have strong inducements to persevere in their studies. Parents and guardians, in fixing the destination of these for whose education they have to provide, will be enabled to judge of the comparative advantages of several institutions with regard to instruction, health, expense and society. Teachers who are qualified for the important office, may be brought into deserved notice, and receive that justice and credit, to which an honest discharge of professional duties justly entitles them.

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